

Appl. No. 09/762,991
Reply to Office Action of September 2, 2005

Attorney Docket No. RR2606 (22171.240)
Customer No. 27683

REMARKS

Claims 4, 6-12 and 14-21 are present in the application. In view of the remarks that follow, Applicants respectfully request reconsideration.

Allowable Subject Matter

Noted with appreciation is the indication in the Office Action that Claims 4, 9, 12, 14, 17-18 and 21 have been allowed.

Also noted with appreciation is the indication that Claims 15-16 and 19-20 are directed to allowable subject matter, subject to correction of rejections for indefiniteness under the second paragraph of 35 U.S.C. §112. The §112 rejections are discussed separately below.

Second Paragraph of 35 U.S.C. §112 – Claim 15

The Office Action rejected Claim 15 as indefinite under the second paragraph of 35 U.S.C. §112, asserting that it is not clear where the recited tail bits are located. This ground of rejection is respectfully traversed. Claim 15 recites that the frame structure includes overhead bits, that the overhead bits include CRC bits, and that tail bits are appended to the frame structure. That is, the overhead bits can be within the frame structure, and the tail bits can be external of and appended to the frame structure. Applicants believe that Claim 15 is very clear as to where the tail bits are located. Applicants admit that Claim 15 recites the location of the tail bits in language that is very broad. However, the fact that a claim limitation is broad does not automatically mean it is indefinite. In this regard, the attention of the Examiner is respectfully directed to MPEP §2173.04, the title of which emphasizes that "**Breadth Is Not Indefiniteness**". This section of the MPEP states that:

Breadth of a claim is not to be equated with indefiniteness. *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). If the scope

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of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. 112, second paragraph.

In the Office Action, the brief comment about Claim 15 does not give any clear reason as to why Claim 15 might possibly be considered to be indefinite, rather than just broad. It is therefore respectfully submitted that Claim 15 is in fact definite and in full compliance with the second paragraph of §112, and notice to that effect is respectfully requested.

Second Paragraph of 35 U.S.C. §112 – Claims 6, 7 and 16

The Office Action rejected Claims 7 and 16 under the second paragraph of 35 U.S.C. §112 as indefinite. Claims 7 and 16 each include a limitation reciting that "the number of ARQ blocks is responsive to the environment for producing a relatively high throughput". In regard to this limitation, the Examiner asserts that:

it is unclear how "the number of ARQ blocks" are determined or generated "responsive to the environment" for "producing a relatively high throughput".

Applicants respectfully disagree. For example, the specification explains in the first, third and fourth paragraphs on page 4 that the number of ARQ blocks can be varied in response to the environment to produce a relatively high throughput. Further, Table 1 on page 8 (and the associated text) show examples of how different numbers of ARQ blocks can be used under different operating conditions. Applicants respectfully submit that the claim limitation in question is broad, not indefinite. And as discussed above, MPEP §2174.04 specifies that "Breadth of a claim is not to be equated with indefiniteness". The Examiner states that

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"Applicant is requested to reference the specification so that mete and bounds can be determined". As best understood, the Examiner is not comfortable with the fact that Applicants have used broad language, and wants to read limitations from the specification into Claims 7 and 16, in order to narrow Applicants' broad language to a scope with which the Examiner is more comfortable. However, as discussed in MPEP §2111, it is not proper to read limitations from the specification into the claims.

MPEP §2173.02 provides that:

Definiteness of claim language must be analyzed, not in a vacuum,
but in light of:

- (A) The content of the particular application disclosure;
- (B) The teachings of the prior art; and
- (C) The claim interpretation that would be given by one
possessing the ordinary level of skill in the pertinent
art at the time the invention was made.

It is respectfully submitted that, in the present Office Action, the indicated limitation from Claims 7 and 16 is being analyzed in a vacuum, rather than in light of factors such as the "interpretation that would be given by one possessing the ordinary level of skill in the pertinent art". For example, the Office Action offers no analysis as to why a person skilled in the art would not be able to readily comprehend the indicated limitation from Claims 7 and 16. In fact, the Examiner suggests that the phrase "a relatively high throughput" should be deleted from these claims, without offering any proper analysis of why a person skilled in the art would have absolutely no idea of what would constitute "a relatively high throughput" for a system of the type recited in Claims 7 and 16. Applicants believe that persons skilled in this art have a very good understanding of different levels of throughput, and thus understand what constitutes "a relatively high throughput". Applicants respectfully submit that the claim limitations in question

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are broad rather than indefinite, and that persons skilled in the art will readily understand what these claim limitations are broadly reciting. Accordingly, it is respectfully submitted that Claims 7 and 16 are definite and in full compliance with the second paragraph of §112, and notice to that effect is respectfully requested.

Claim 6 was rejected as indefinite under the second paragraph of §112, solely because of its dependency from Claim 7. For reasons discussed above, Claim 7 is believed to be in compliance with §112. Claim 6 is therefore also believed to be in compliance with §112.

Second Paragraph of 35 U.S.C. §112 – Claims 10 and 19

The Office Action rejected Claims 10 and 19 under the second paragraph of 35 U.S.C. §112 as indefinite. Claim 10 recites that "the number of FEC blocks and ARQ blocks are modifiable to balance requirements for data transmission and voice transmission". Claim 19 recites that "the arranging means modifies the number of FEC blocks and ARQ blocks to balance requirements for data transmission and voice transmission. In regard to these limitations, the Examiner asserts that:

it is unclear what is meant by "wherein the number of FEC blocks
and ARQ blocks are modifiable to balance requirement for data
transmission and voice transmission".

Applicants respectfully disagree. Applicants admit that the quoted claim limitations are each broad but, as discussed above, MPEP §2174.04 specifies that "Breadth of a claim is not to be equated with indefiniteness". The Examiner asserts that:

metes and bounds cannot be determined because "balance
requirements for data transmission and voice transmission" is
unknown.

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But as best understood, the Examiner is apparently not comfortable with the fact that Applicants have used broad claim language, and wants to read limitations from the specification into Claims 10 and 19 in order to narrow the "metes and bounds" of Applicants' broad language to a scope with which the Examiner is more comfortable. However, as discussed in MPEP §2111, it is not proper to read limitations from the specification into the claims.

As discussed above, MPEP §2173.02 provides that:

Definiteness of claim language must be analyzed, not in a vacuum,
but in light of:

- (A) The content of the particular application disclosure;
- (B) The teachings of the prior art; and
- (C) The claim interpretation that would be given by one
possessing the ordinary level of skill in the pertinent
art at the time the invention was made.

It is respectfully submitted that, in the present Office Action, the indicated limitations from Claims 10 and 19 are being analyzed in a vacuum, rather than in light of factors such as the "interpretation that would be given by one possessing the ordinary level of skill in the pertinent art". For example, the Office Action offers no analysis as to why a person skilled in the art would not be able to readily comprehend the idea that the number of FEC blocks and ARQ blocks is varied to help balance requirements for data transmission and voice transmission. Applicants respectfully submit that the claim limitations in question are broad rather than indefinite, and that persons skilled in the art will readily understand what these claim limitations are broadly reciting. Accordingly, it is respectfully submitted that Claims 10 and 19 are definite and in full compliance with the second paragraph of §112, and notice to that effect is respectfully requested.

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Second Paragraph of 35 U.S.C. §112 – Claims 11 and 20

The Office Action rejected Claims 11 and 20 under the second paragraph of 35 U.S.C. §112 as indefinite. Claims 11 and 20 each include a reference to "mobile station complexity". In regard to this limitation, the Examiner asserts that:

it is unclear what is meant by "mobile station complexity".

Applicants respectfully disagree. For example, the specification discusses mobile station complexity in the last paragraph on page 2, in the third and fourth paragraphs on page 4, and in the paragraph that bridges pages 11-12. Applicants respectfully submit that the limitation "mobile station complexity" is broad, not indefinite. As discussed above, MPEP §2174.04 specifies that "Breadth of a claim is not to be equated with indefiniteness". The Examiner states that "Applicant is request[ed] to reference the specification so that mete and bounds can be determined". As best understood, the Examiner is not comfortable with the fact that Applicants have used broad claim language, and wants to read limitations from the specification into Claims 11 and 20 in order to narrow Applicants' broad language to a scope with which the Examiner is more comfortable. However, as discussed in MPEP §2111, it is not proper to read limitations from the specification into the claims.

As discussed above, MPEP §2173.02 provides that:

Definiteness of claim language must be analyzed, not in a vacuum,
but in light of:

- (A) The content of the particular application disclosure;
- (B) The teachings of the prior art; and

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(C) The claim interpretation that would be given by one
possessing the ordinary level of skill in the pertinent
art at the time the invention was made.

It is respectfully submitted that, in the present Office Action, the indicted limitation from Claims 11 and 20 is being analyzed in a vacuum, rather than in light of factors such as the "interpretation that would be given by one possessing the ordinary level of skill in the pertinent art". For example, the Office Action offers no analysis as to why a person skilled in the art would not readily understand what is meant by "mobile station complexity". Applicants respectfully submit that this claim limitations is broad rather than indefinite, and that persons skilled in the art will readily understand what this limitation is broadly referring to. Accordingly, it is respectfully submitted that Claims 11 and 20 are definite and in full compliance with the second paragraph of §112, and notice to that effect is respectfully requested.

35 U.S.C. §103 - Claims 7 and 8

Independent Claims 7 and 8 each stand rejected under 35 U.S.C. §103 on the ground that they would be obvious in view of Jayapalan U.S. Patent No. 5,533,019. These grounds of rejection are each respectfully traversed. In this regard, the PTO specifies in MPEP §2142 that:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

Applicants respectfully submit that Jayapalan fails to establish a *prima facie* case of obviousness under §103 with respect to either Claim 7 or Claim 8, for the mutually exclusive reasons that are discussed below.

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JAYAPALAN FAILS TO TEACH ALL CLAIM LIMITATIONS

The provisions of MPEP §2142 specify with respect to §103 that:

To establish a *prima facie* case of obviousness . . . the prior art reference (or references when combined) must teach or suggest all the claim limitations. (Emphasis added).

The PTO considers this requirement to be important, as evidenced by the fact that this exact language appears not only in MPEP §2142, but also in other sections of the MPEP, including MPEP §706.02(j) and MPEP §2143.

Applicants' Claim 7 recites that "the number of ARQ blocks is responsive to the environment for producing a relatively high throughput". Claim 8 recites that "the number of ARQ blocks is responsive to whether the information is voice or data". With respect to Claim 7, the Examiner asserts that "ARQ is inherently response to the noisy environment to retransmit data and reproduce data for relatively high throughput". With respect to Claim 8, the Examiner asserts that "ARQ is responsive to whether the information is voice or data". However, these two statements by the Examiner fail to meet the actual claim language. In particular, the quoted limitations from Claims 7 and 8 each specify that the number of ARQ blocks is dynamically varied. In contrast, in explaining the rejections of Claims 7 and 8, the Office Action does not assert that Jayapalan varies the number of ARQ blocks, much less identify any particular part of Jayapalan that discusses variation of the number of ARQ blocks. In fact, the Jayapalan patent mentions "ARQ" only twice, namely in the first few lines of column 7. This mention of ARQ in Jayapalan is vague and, as best understood, does not include any clear disclosure that the number of ARQ blocks are varied on the basis of some specific criteria, much less the specific criteria that is recited in Claim 7 or the specific criteria that is recited in Claim 8. Jayapalan thus fails to satisfy the requirement of MPEP §2142 that the prior art must "teach or suggest all the claim limitations" (emphasis added). Therefore, for this independent reason alone, it is respectfully

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submitted that neither of Claims 7 and 8 is obvious under § 103 in view of Jayapalan, and notice to that effect is respectfully requested.

THE § 103 REJECTION FAILS TO COMPLY WITH PTO REQUIREMENTS

MPEP § 706.02(j) explains that an examiner must satisfy four specific requirements in order to establish a *prima facie* case of obviousness under 35 U.S.C. § 103. In particular, MPEP § 706.02(j) specifies that:

35 U.S.C. 103 authorizes a rejection where, to meet the claim, it is necessary to modify a single reference or to combine it with one or more other references. After indicating that the rejection is under 35 U.S.C. 103, the examiner should set forth in the Office action:

(A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate,

(B) the difference or differences in the claim over the applied reference(s),

(C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and

(D) an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification.

In the present situation, the § 103 rejection satisfies requirements (A) and (B), because it identifies some teachings from Jayapalan as required by (A), and also identifies some differences from Jayapalan as required by (B). However, the § 103 rejection does not satisfy either of requirements (C) or (D).

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More specifically, in order to meet requirement (C), the §103 rejection must propose a modification to Jayapalan (namely to cure the deficiencies in Jayapalan that were identified in order to meet requirement (B)). However, the present §103 rejection does not propose any modification to Jayapalan. Instead, what the §103 rejection proposes (in lines 3-4 on page 4) is that a spread spectrum wireless network (not disclosed in Jayapalan) could be modified to include selected teachings from Jayapalan. Since Jayapalan is the only reference on which the §103 rejection is based, the rejection must propose a modification to Jayapalan, rather than proposing a modification to a system that is not even disclosed in any reference on which the rejection is based.

Moreover, in order to meet requirement (D), the §103 rejection must explain why a person of ordinary skill in the art would be motivated to make the proposed modification to Jayapalan. But since the modification proposed in the Office Action is not a modification to Jayapalan, the Office Action obviously fails to properly explain why a person skilled in the art would be motivated to make a modification to Jayapalan.

Applicants therefore respectfully submit that the §103 rejection is defective, because it fails to satisfy two of the PTO's four specific requirements for a §103 rejection, and therefore fails to establish a prima facie case of obviousness under §103. For this reason alone, it is respectfully submitted that the pending §103 rejection must be withdrawn, and notice to that effect is respectfully requested.

In view of the various different reasons discussed above, it is respectfully submitted that Claims 7 and 8 are not rendered obvious under §103 by Jayapalan. Claims 7 and 8 are therefore believed to be allowable, and notice to that effect is respectfully requested.

Conclusion

Based on the foregoing, it is respectfully submitted that all of the pending claims are fully allowable, and favorable reconsideration of this application is respectfully requested. If the Examiner believes that examination of the present application may be advanced in any way by a

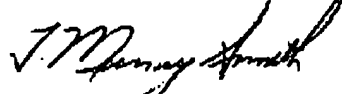
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telephone conference, the Examiner is invited to telephone the undersigned attorney at 972-739-8647.

Although Applicants believe that no additional fee is due, the Commissioner is hereby authorized to charge any fee required by this paper, or to credit any overpayment, to Deposit Account No. 08-1394 of Haynes and Boone, LLP.

Respectfully submitted,


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Enclosure: None

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